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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,992	06/01/2001	James D. Flavin	19134.0007	8292

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EXAMINER

GUILL, RUSSELL L

ART UNIT	PAPER NUMBER
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2123

DATE MAILED: 05/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/870,992

Applicant(s)

FLAVIN, JAMES D.

Examiner

Russell L. Guill

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01/01/01 1 page
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1 – 16 have been examined. Claims 1 – 16 have been rejected.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1 - 15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims appear to be directed to an abstract idea or algorithm that does not result in a concrete and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.
4. Claim 16 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim appears to be directed to an abstract idea that is not a concrete and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

***5. Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 – 9 and 13 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah (International Publication Number WO 99/22332) in view of Minasi (Minasi, Mark; “Mastering Windows NT Server 4”, 1998, SYBEX), further in view of common knowledge in the art.

7.1. The art of Shah is directed toward a system for providing remote applications and computing resources over a network (Abstract), including access control and billing (page 5, lines 4 - 25).

7.2. The art of Minasi is directed toward managing the Windows NT Server 4 operating system.

7.3. Regarding claim 1:

7.3.1. Shah appears to teach creating an organization entity (page 5, lines 4 – 25).

7.3.2. Shah appears to teach a data center with application servers (figure 1, and Abstract).

7.3.3. Shah appears to teach propagating at least one of the organization unit and the group identification number to at least one application server within the data center (page 5, lines 15 – 23; and figure 1, App servers; and page 3, lines 26 - 31).

7.3.4. Shah does not specifically teach creating an organization unit for the organization entity.

7.3.5. Shah does not specifically teach associating a group identification number with the organization entity.

**7.3.6.** Minasi appears to teach creating an organization unit for the organization entity (page 70, section Groups; please refer to the organization units Biology and Chemistry).

**7.3.7.** Official Notice is taken that it was common knowledge to the ordinary artisan at the time of invention to assign a numeric code to represent an organization entity. For example, the simulation and modeling group of examiners at the U.S. PTO is assigned the art unit number 2123. The motivation to associate a numeric code to an organization entity would have been obvious because it allows similar organizational units to be grouped together in a hierarchical classification numbering structure (e.g. KINGDOM, PHYLUM, CLASS, ORDER, FAMILY, GENUS, SPECIES). For example, art unit 2123 is in the technology center 2100.

**7.3.8.** The art of Minasi and the art of Shah are analogous art because they both contain the problem of managing application server computers, and Shah appears to use Windows NT (Shah, page 6, lines 1 – 5).

**7.3.9.** The motivation to use the art of Minasi with the art of Shah would have been obvious because of the benefit recited in Minasi that common rights and permissions can be assigned to collections of users in the same group (page 70, section Groups, first paragraph), and the statement in Shah that Windows NT applications are used in Shah (page 6, lines 1 – 3).

**7.4.** Regarding claim 2:

**7.4.1.** Shah appears to teach collecting information about the organization entity, and storing the collected information in an administrative database (figure 1, element 112; and page 5, lines 10 – 25; and page 7, lines 4 – 6; and page 3, lines 26 – 31).

**7.5. Regarding claim 3:**

**7.5.1.** Shah appears to teach associating a suffix with the organization entity, and verifying the uniqueness of the suffix within the data center (page 5, lines 20 – 25).

**7.5.1.1.** Regarding (page 5, lines 20 – 25); it would have been obvious to associate a unique suffix to identify a business object.

**7.6. Regarding claim 4:**

**7.6.1.** Shah appears to teach storing in an administrative database the suffix, the organization unit and the group identification number (page 5, lines 20 – 22; and page 3, lines 26 – 31).

**7.7. Regarding claim 5:**

**7.7.1.** Shah appears to teach storing permission information for application services in association with the organization entity in an administrative database (page 6, lines 22 – 31; specifically, Access control; and page 3, lines 26 – 31vv).

**7.8. Regarding claim 6:**

**7.8.1.** Shah appears to teach that permission information includes information identifying the application services (page 5, lines 24 – 31; and page 6, lines 11 – 22).

**7.9. Regarding claim 7:**

**7.9.1.** Shah appears to teach that application services include rendering a published application (page 6, lines 1 – 5).

**7.9.1.1.** Regarding (page 6, lines 1 – 5); it would have been obvious that rendering is performed for published applications.

**7.10.** Regarding claim 8:

**7.10.1.** Shah appears to teach that application services include rendering a custom application (page 6, lines 1 – 5).

**7.10.1.1.** Regarding (page 6, lines 1 – 5); it would have been obvious that rendering is performed for custom applications.

**7.11.** Regarding claim 9:

**7.11.1.** Shah appears to teach storing permission information for data associated with the organization entity in the administrative database (page 6, lines 23 – 31; and page 5, lines 4 - 23; and page 3, lines 26 - 31).

**7.12.** Regarding claim 13:

**7.12.1.** Shah appears to teach propagating at least one of the organization unit and the group identification number to at least one application server within the data center (page 5, lines 15 – 23; and figure 1, App servers; and page 3, lines 26 - 31).

**7.12.2.** Shah does not specifically teach adding a user to the organization entity.

**7.12.3.** Shah does not specifically teach associating a user identification with the user.

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**7.12.4.** Shah does not specifically teach propagating the user identification in association with at least one of the organization unit and the group identification number to at least one application server within the data center.

**7.12.5.** Minasi appears to teach adding a user to the organization entity (page 355, figure 6.5 Group Memberships).

**7.12.6.** Minasi appears to teach associating a user identification with the user (page 347, figure 6.1, columns labeled "Username" and "Full Name").

**7.12.7.** Minasi appears to teach associating a user identification with an organization (page 355, figure 6.5 Group Memberships).

**7.12.8.** The art of Minasi and the art of Shah are analogous art because they both contain the problem of managing application server computers, and Shah appears to use Windows NT (Shah, page 6, lines 1 – 5).

**7.12.9.** The motivation to use the art of Minasi with the art of Shah would have been obvious because of the benefit recited in Minasi that common rights and permissions can be assigned to collections of users in the same group (page 70, section Groups, first paragraph), and the statement in Shah that Windows NT applications are used in Shah (page 6, lines 1 – 3).

**7.13.** Regarding claim 14:

**7.13.1.** Shah does not specifically teach storing the user identification in the administrative database.



**7.13.2.** Minasi appears to teach storing the user identification in the administrative database (pages 345 – 346, section labeled “User Accounts Sit on the PDC”).

**7.13.2.1.** Regarding (pages 345 – 346, section labeled “User Accounts Sit on the PDC”); it would have been obvious that registry is an administrative database.

**7.13.3.** The art of Minasi and the art of Shah are analogous art because they both contain the problem of managing application server computers, and Shah appears to use Windows NT (Shah, page 6, lines 1 – 5).

**7.13.4.** The motivation to use the art of Minasi with the art of Shah would have been obvious because of the statement in Shah that Windows NT applications are used in Shah (page 6, lines 1 – 3).

**7.14.** Regarding claim 15:

**7.14.1.** Shah appears to teach storing permission information for application services in an administrative database (page 6, lines 23 – 31; and page 5, lines 4 – 31; and page 3, lines 26 – 31).

**7.14.2.** Shah does not specifically teach storing permission information for application services in association with the user identification in an administrative database.

**7.14.3.** Minasi appears to teach storing permission information for users in an administrative database (page 70, section labeled Groups).

**7.14.4.** The art of Minasi and the art of Shah are analogous art because they both contain the problem of managing application server computers, and Shah appears to use Windows NT (**Shah, page 6, lines 1 – 5**).

**7.14.5.** The motivation to use the art of Minasi with the art of Shah would have been obvious because of the statement in Shah that Windows NT applications are used in Shah (**page 6, lines 1 – 3**).

**7.15.** Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Minasi with the art of Shah to produce the claimed invention.

**8.** Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shah (International Publication Number WO 99/22332) and Minasi (Minasi, Mark; “Mastering Windows NT Server 4”, 1998, SYBEX) and common knowledge in the art, in view of Shaw (U.S. Patent 6,104,392).

**8.1.** Claims 10 and 11 are dependent claims of claim 1, and thereby inherit all of the rejected limitations of claim 1.

**8.2.** The art of Shah is directed toward a system for providing remote applications and computing resources over a network (**Abstract**), including access control and billing (**page 5, lines 4 - 25**).

**8.3.** The art of Shaw is directed to displaying an application on a variety of client devices in a client/server network (**Title of patent**).

**8.4.** Regarding claim 10:

**8.4.1.** Shah appears to teach that applications include Windows applications (page 5, lines 24 – 30).

**8.4.2.** Shah does not specifically teach that the applications include Windows applications and UNIX applications.

**8.4.3.** Shaw appears to teach that applications include UNIX applications (column 5, lines 64 – 66; and figure 1, elements 82C and 82).

**8.4.4.** The art Shaw and the art of Shah are analogous art because they are both directed to a networked data processing environment using a client/server architecture (Shaw, column 1, lines 30 – 40; and figure 1) and (Shah, Abstract; and figure 1).

**8.4.5.** The motivation to use the art of Shaw with the art of Shah would have been obvious because of the benefit recited in Shaw that the invention permits the efficient operation of an application (on the server) without overloading the connection to the client (column 4, lines 2 – 5).

**8.5.** Regarding claim 11:

**8.5.1.** Shah does not specifically teach that propagating is performed based on an active directory.

**8.5.2.** Shaw appears to teach that propagating is performed based on an active directory (column 6, lines 45 – 60).

**8.5.3.** The art Shaw and the art of Shah are analogous art because they are both directed to a networked data processing environment using a client/server

architecture (Shaw, column 1, lines 30 – 40; and figure 1) and (Shah, Abstract; and figure 1).

- 8.5.4.** The motivation to use the art of Shaw with the art of Shah would have been obvious because of the benefit recited in Shaw that using the method of Shaw avoids duplication of information and functionality (column 6, lines 49 – 56).
- 8.6.** Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Shaw with the art of Shah to produce the claimed invention.
- 9.** Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shah (International Publication Number WO 99/22332 and Minasi (Minasi, Mark; “Mastering Windows NT Server 4”, 1998, SYBEX), and common knowledge in the art, in view of Debique (U.S. Patent No. 5,613,079).
- 9.1.** Claim 12 is a dependent claim of claim 1, and thereby inherits all of the rejected limitations of claim 1.
- 9.2.** The art of Debique is directed to verification of replication of multi-master databases (Abstract, and column 1, lines 10 – 65).
- 9.3.** Shah does not explicitly teach that propagating is performed based on a multi-master architecture.
- 9.4.** Debique appears to teach a multi-master architecture (Abstract, and column 1, lines 10 – 65).

- 9.5. The art of Debique and the art of Shah are analogous art because they both contain the problem of distributed system environment (Debique, Abstract; and Shah, figure 1).
- 9.6. The motivation to use the art of Debique with the art of Shah would have been obvious given the distributed system of Shah (figure 1), and benefit in Debique that distributed database replication can be verified (Abstract, and column 1, lines 10 – 65).
- 9.7. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Debique with the art of Shah to produce the claimed invention.
10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shah (International Publication Number WO 99/22332) in view of Minasi (Minasi, Mark; “Mastering Windows NT Server 4”, 1998, SYBEX), further in view of Tanenbaum (Tanenbaum, Andrew S.; “Computer Networks”, third edition, 1996, Prentice-Hall).
- 10.1. The art of Shah is directed toward a system for providing remote applications and computing resources over a network (Abstract), including access control and billing (page 5, lines 4 - 25).
- 10.2. The art of Minasi is directed toward managing the Windows NT Server 4 operating system.
- 10.3. The art of Tanenbaum is directed to computer networks (Title).
- 10.4. Shah appears to teach an application server array for providing applications to remote clients (figure 1, App Servers).

10.5. Shah appears to teach a brokering array for translating output from at least some of the applications to a communication protocol (page 6, line 3; and page 6, lines 1 – 7).

10.5.1. Regarding (page 6, line 3; and page 6, lines 1 – 7); it would have been obvious that for output of an application to appear on a client computer that the output is translated into a communications protocol.

10.6. Shah appears to teach a database for storing administrative data and application data (figure 1, database service; and page 3, lines 27 – 31).

10.7. Shah appears to teach a switching system for linking the database and arrays with each other and a communications network for delivering application service to remote clients (figure 1).

10.8. Shah appears to teach an administration array coupled to the database (figure 1; and page 3, lines 27 – 31), the administration array storing information into the administration database and propagating information to the application array (figure 1; and page 3, lines 27 – 31).

10.9. Shah does not specifically teach an administration array coupled to the database, the administration array receiving organization information, storing the information into the administration database and propagating the organization information to the application array.

10.10. Shah does not appear to teach a redundant switching system for linking the database and arrays with each other and a communications network for delivering application service to remote clients.

- 10.11.** Tanenbaum appears to teach a redundant switching system (page 137, figure 2-39(a) and (b); and page 137, second paragraph that starts with the phrase “The second stage . . . “; and page 135, figure 2-37).
- 10.12.** The art Tanenbaum and the art of Shah are analogous art because they both contain the problem of interconnecting computers in a network (Tanenbaum, Title) and (Shah, figure 1).
- 10.13.** The motivation to use the art of Tanenbaum with the art of Shah would have been obvious because of the benefit recited in Tanenbaum that the network system can connect calls along many paths (page 135, first paragraph).
- 10.14.** Minasi appears to teach receiving organization information (page 70, section Groups), and storing the organization information into an administration database (page 355, figure 6.5).
- 10.14.1.** Regarding (page 355, figure 6.5); it would have been obvious that the group organization information is stored in an administration database.
- 10.15.** The art of Minasi and the art of Shah are analogous art because they both contain the problem of managing application server computers, and Shah appears to use Windows NT (Shah, page 6, lines 1 – 5).
- 10.16.** The motivation to use the art of Minasi with the art of Shah would have been obvious because of the benefit recited in Minasi that common rights and permissions can be assigned to collections of users in the same group (page 70, section Groups, first paragraph), and the statement in Shah that Windows NT applications are used in Shah (page 6, lines 1 – 3).

**10.17.** Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Tanenbaum with the art of Shah to produce the claimed invention.

**Conclusion**

**11.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell L. Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday – Friday 9:00 AM – 5:30 PM.

**12.** If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 571-272-3716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

**13.** Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RG

  
KEVIN J. TESKA  
SUPERVISORY  
PATENT EXAMINER